PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(10000-49999 LEVEL)

DEPARTMENT Chemistry
EFFECTIVE SESSION Fall 2014

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

- [ ] New course with supporting documents
- [ ] Add existing course offered at another campus
- [ ] Expiration of a course
- [ ] Change in course number
- [x] Change in course title
- [ ] Change in course credit/grade
- [ ] Change in course attributes (department head signature only)
- [ ] Change in instructional hours
- [x] Change in course description
- [ ] Change in course requisites
- [ ] Change in semesters offered (department head signature only)
- [ ] Transfer from one department to another

PROPOSED:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>CHM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>49600</td>
</tr>
<tr>
<td>Long Title</td>
<td>Senior Seminar I</td>
</tr>
<tr>
<td>Short Title</td>
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EXISTING:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>CHM</th>
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</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>49600</td>
</tr>
</tbody>
</table>

TERMS OFFERED: Check All That Apply:

- [x] Fall
- [ ] Spring
- [ ] Summer

CAMPUS(ES) INVOLVED:

- [ ] Calumet
- [ ] Cont Ed
- [x] Ft. Wayne
- [ ] Tech Statewide
- [ ] Indianapolis
- [ ] W. Lafayette

Abbreviated title will be entered by the Office of the Registrar if omitted. (20 CHARACTERS ONLY)

CREDIT TYPE

1. Fixed Credit: Cr. Hrs.
2. Variable Credit Range:
   Minimum Cr. Hrs. (Check One) To Or
   Maximum Cr. Hrs.
3. Equivalent Credit: Yes [ ] No [x]

COURSE ATTRIBUTES: Check All That Apply

1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
4. Credit by Examination
5. Fees: [ ] Coop [ ] Lab [ ] Rate Request
   Include comment to explain fee
6. Registration Approval Type
   Department [ ] Instructor [x]
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

Schedule Type

<table>
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<tr>
<th>Lecture</th>
<th>Recitation</th>
<th>Presentation</th>
<th>Laboratory</th>
<th>Lab Prep</th>
<th>Studio</th>
<th>Distance</th>
<th>Clinic</th>
<th>Experiential</th>
<th>Research</th>
<th>Ind. Study</th>
<th>Pract/Obser</th>
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</table>

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<tr>
<th>Minutes Per Mtg</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
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</thead>
</table>

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

Course Description

P: CHM 20200. Seminars on recent developments or topics not normally covered in regular courses. Attendance at all departmental seminars is required and students must submit a brief synopsis of 1 seminar attended. Students will choose a research topic and begin drafting a paper.

*COURSE LEARNING OUTCOMES:

Students will demonstrate critical listening skills; this will require each student to attend all departmental seminars for that academic semester and will be assessed on the synopsis that each student will submit for one of the seminars.

Calumet Department Head Date

Fort Wayne Department Head Date

Indianapolis Department Head Date

North Central Faculty Senate Chair Date

Vice Chancellor for Academic Affairs Date

West Lafayette Department Head Date

West Lafayette College/School Dean Date

OFFICE OF THE REGISTRAR
CHEMISTRY 49600
SENIOR SEMINAR I

Course description: CHM 49600 is the first half of the senior two-seminar sequence required for Chemistry majors. It is a 0 credit course which is then followed by the one-credit CHM 49700 course. The two-semester sequence CHM 49600 / CHM 49700 is intended to be taken during the academic year when a student intends to graduate. Both courses are offered in the Fall and Spring semesters to allow for the possibility that a student will graduate at the end of Fall semester. CHM 49600 has the following learning goal and outcome:

Students will demonstrate critical listening skills; this will require each student to attend all departmental seminars for that academic semester and will be assessed on the synopsis that each student will submit for one of the seminars.

Course prerequisite: CHM 28000

Course grading:

1) Overall breakdown:
   Class performance is graded as Pass/Not Pass. To pass the course, students must attend all seminars in the semester (or ‘make-up’ any missed seminars; see below) and score at least 60% on seminar synopses.
   Your instructor may require you to submit written assignments through Turnitin.

2) Seminar attendance:
   Attendance at all seminars given during the course is mandatory. If a student misses a seminar, she or he must view an online seminar, chosen by the course instructor, and submit a synopsis for it. This synopsis will be in addition to the one required synopsis.

3) Seminar synopsis:
   Students will be required to write a brief (one page) synopsis for one of the seminars given during the semester; the synopsis will be evaluated on the quality of the writing (grammar and spelling) and for addressing the following questions:

   1) What was the general topic of the seminar?
   2) What important contributors to this topic were identified?
   3) What were the goals of the speaker’s research?
   4) What analytical or synthetic methods were employed in the research?
   5) What potential applications of this research were noted?
   6) What entities provided funding for this research?
   7) What is a question you would ask about the seminar speaker’s research?

Please note that the synopsis should be written in a narrative format; students should avoid the use of these questions as mere bullet points followed by answers.
4) Research paper:
Students will be required to choose a research topic from the chemical literature (based on 4-6 citations from refereed sources and using the ACS bibliographic format style) and write a 3000-word paper on it (not including references, figures and captions); to ensure that each student is making consistent progress on this task, the following deadlines are established for CHM 49600 and the sequel CHM 49700:

1) Choice & approval of topic: Sept. 30th (Fall 49600) or Feb. 28th (Spring 49600)
2) Outline and identification of cited references: Oct. 31st (Fall) or March 31st (Spring)
3) First draft: January 30th (Spring 49700) or September 30th (Fall 49700)
4) Final draft: March 31st (Spring 49700) or November 15th (Fall 49700)

The course instructor may require additional drafts from an individual student, if deemed necessary. The final draft of the paper (due in CHM 49700) will be assessed based on the following categories:

1) Organization of topics and synthesis of ideas (25%)
2) Breadth and depth of treatment (15%)
3) Clarity and consistency of logic (15%)
4) Support of conclusions by cited data (15%)
5) Clarity and quality of writing (30%)

5) Alternative for CHM 499 students
If a student is concurrently enrolled in CHM 49900 (Undergraduate research), she or he may choose to use the paper prepared for that course for this requirement of CHM 49600/49700. If this option is chosen, the paper will be organized according to the ACS CPT Guidelines for Preparing a Research Report (available at the following website: http://portal.acs.org/portal/fileFetch/C/CTP_005606/pdf) and assessed using the categories specified in section 4) above. Deadlines will need to be coordinated between the instructor for CHM 49600/700 and the faculty mentor overseeing CHM 49900, but each faculty member will determine the grade for the paper independently. The ACS bibliographic format style should be used for citation of references.

6) Chemistry Students' Code of Ethics and Conduct

Students are expected to adhere to the code of ethics and conduct specific to the field of chemistry for the chemistry courses in which they are enrolled and for activities under the auspices of the IPFW department of chemistry. In particular, students are expected, where applicable, to abide by The Chemical Professional's Code of Conduct approved by the American Chemical Society (ACS). Students who intentionally commit serious violations are subject to the same disciplinary action incurred by academic and personal misconduct as described in the IPFW Student Rights, Responsibilities, and Conduct and Purdue's Regulations Governing Student Conduct, Disciplinary Regulations, and Appeals. This policy is intended to be consistent with and is not to be construed to conflict with or supersede any established IPFW or PUWL policy. (See http://new.ipfw.edu/departments/coas/depts/chemistry/course )
CHM 49600/700 research paper assessment rubric

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<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
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<tbody>
<tr>
<td><strong>Organization of topics and synthesis of ideas (25%)</strong></td>
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<tr>
<td>Incoherent with no</td>
<td>Partially coherent with</td>
<td>Mostly coherent with a</td>
<td>Ideas/topics compiled coherently to show</td>
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<td>relationships shown.</td>
<td>several relationships</td>
<td>few relationships not</td>
<td>relationships among</td>
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<td></td>
<td>not addressed.</td>
<td>addressed.</td>
<td>them.</td>
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<td><strong>Breadth and depth of treatment (15%)</strong></td>
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<td>Number of topics is</td>
<td>Too many topics with</td>
<td>Some imbalance between</td>
<td>Number and coverage</td>
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<tr>
<td>insufficient and their</td>
<td>marginal coverage or</td>
<td>number of topics and</td>
<td>of topics are</td>
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<tr>
<td>coverage is marginal.</td>
<td>too few topics with</td>
<td>depth of their</td>
<td>appropriate and balanced.</td>
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<td>excessive coverage.</td>
<td>coverage.</td>
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<td><strong>Clarity and consistency of logic (15%)</strong></td>
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<td>Ideas/topics and</td>
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<td>conclusions are</td>
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<td>conclusions are mostly</td>
<td>conclusions are stated</td>
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<td>unclear; no logical</td>
<td>somewhat clear; focus</td>
<td>clear with a</td>
<td>clearly, with a consistent, logical</td>
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<td>focus is discernible.</td>
<td>is discernible, but</td>
<td>discernible, logical</td>
<td>focus.</td>
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<td></td>
<td>logic is unclear.</td>
<td>focus.</td>
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<tr>
<td><strong>Support of conclusions by cited data (15%)</strong></td>
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<tr>
<td>No sources cited are</td>
<td>Some sources cited are</td>
<td>Most sources cited are</td>
<td>All sources cited are</td>
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<td><strong>Clarity and quality of writing (30%)</strong></td>
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<tr>
<td>Narrative is confusing</td>
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<td>Narrative is easily</td>
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<td>in many places due to</td>
<td>in a few places due to</td>
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<td>spelling errors.</td>
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